

WISCONSIN EPI EXPRESS

June 18, 2001

Wisconsin Department of Health & Family Services
Division of Public Health
Bureau of Communicable Diseases

"Surveillance provides information for action." [World Health Organization](#)

The WISCONSIN EPI EXPRESS provides a regular update on communicable disease issues of importance in our state and is intended primarily for participants in the public health surveillance system. Please let us know if the topics covered are on target or if there are others that we should be addressing. Thank you. Herb Bostrom: bostrhh@dhfs.state.wi.us

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1. Control measures for meningococcal disease outbreaks

Meningococcal disease received considerable attention in the news media recently when three high school students in Ohio had invasive infections with *Neisseria meningitidis* serogroup C. Mass chemoprophylaxis and an immunization campaign was conducted there as a result. In the United States, 3-5% of the cases of meningococcal disease are associated with epidemics while the remainder are sporadic. Most meningococcal disease epidemics in the U.S. are caused by *Neisseria meningitidis* serogroup C. The control measures used in the management of sporadic cases continue to be very important to minimize transmission and control an outbreak. Vigilant surveillance and early diagnosis and treatment of cases are emphasized. People with direct contact with oral or nasal secretions of case patients are carefully identified and chemoprophylaxis is administered. Direct contact includes the following exposures:

- Sharing eating or drinking utensils
- Sharing water bottles
- Kissing
- Sharing cigarettes

Persons who are casual contacts of a case patient without direct contact are not considered to be at increased risk for developing the disease and therefore do not need chemoprophylaxis.

Generally, mass chemoprophylaxis is not effective but may be considered when a small, well-defined population is affected. The following table lists the medications recommended for the prophylaxis of direct contacts of sporadic or epidemic cases.

Medication	Dose	Contraindications
Rifampin	Adults: 600 mg po BID x 2 days Children \geq 1 month: 10 mg/kg po BID x 2 days Children < 1 month: 5 mg/kg po BID x 2 days	Not recommended during pregnancy Stains urine and tears, avoid contact lens use
Ciprofloxacin	Adult use only: 500mg po, single dose	Not recommended if <18 y.o., or during pregnancy or lactation
Ceftriaxone	Adults: 250 mg IM, single dose Children < 15 y.o.: 125 mg IM, single dose	

Po = orally, BID = 2 times per day, IM = intramuscularly, y.o. = years old

During an epidemic, vaccination of the population at risk is considered based on the following factors:

- The cases are caused by serogroup A, C, Y or W-135 (these are the serogroups included in the quadrivalent meningococcal vaccine available in the U.S.)
- There is a common age or social denominator such as the occurrence in a school, organization, or town.
- At least three cases of the same serogroup have occurred in a 3-month period.
- Cases continue to occur.
- There is an attack rate of ≥ 10 cases/100,000 population.

Please call the Wisconsin Division of Public Health at (608) 267-9004 if you have questions regarding meningococcal disease.

2. Delayed reporting of case of botulism

During February 2001, the CDC Botulism Laboratory reported to the Wisconsin Division of Public Health a positive stool culture result for *Clostridium botulinum* type A. The stool specimen was obtained from a 75 year-old Wisconsin resident during March 2000. Botulism was clinically suspected in this case-patient when he presented with difficulty swallowing and the sensation of something stuck in his throat. The stool specimen was sent to the CDC for testing for *Clostridium botulinum*; however, the case patient's symptoms resolved spontaneously and he received no treatment for botulism.

Foodborne botulism results from the ingestion of the botulinum toxin. Typical initial symptoms of botulism are diplopia (double vision), blurred vision, difficulty swallowing and dry mouth. These frequently progress to generalized muscle weakness throughout the body and respiratory failure, although mild, self-limited cases are known to occur. For foodborne botulism, trivalent (types A, B, and E) equine antitoxin should be administered when appropriate as soon as possible after laboratory specimens are collected. The decision to treat presumed foodborne botulism is made based on clinical signs and symptoms and should not be delayed to await laboratory confirmation. Laboratory testing for *Clostridium botulinum* can be a lengthy, multi-step process. It is likely that the mild illness of the Wisconsin case patient meant that he had a small amount of toxin in his stool, which made the laboratory diagnosis more difficult and delayed the laboratory confirmation. Further investigation of this Wisconsin case revealed the case patient had no known exposure to home-canned foods and no friends or family members with similar symptoms at the time of his illness. No cases of foodborne botulism were reported in Wisconsin in 2000; therefore, it was concluded that this was an isolated case.

Because the symptoms and signs of botulism are very different from most other infectious diseases, it is less likely to be detected by surveillance of infection control practitioners. Indeed, the infection control practitioner, and the local and state public health personnel were unaware of this possible case and the pending laboratory tests until the results were returned from the CDC. Given the possibility of illness involving other people with the same food exposures and the bioterrorism potential of *Clostridium botulinum*, the prompt reporting of possible cases of botulism is important. We encourage health care providers, infection control practitioners, and laboratory personnel to report possible cases of botulism as soon as they are suspected. Please direct these reports and any questions about botulism to Dr. Donita Croft, Wisconsin Division of Public Health at (608) 267-9004. Dr. Croft can facilitate the collection and processing of laboratory specimens and help obtain the botulism antitoxin from the CDC when necessary.

3. National HIV adult and adolescent and perinatal guidelines updated

Two national HIV treatment guidelines have recently been updated and are available from the website of the federal AIDS Treatment Information Service (ATIS). The updated guidelines include the following:

- *Guidelines for the Use of Antiretroviral Agents in HIV-Infected Adults and Adolescents* (Updated April 23, 2001)
- *Public Health Service Task Force Recommendations for the Use of Antiretroviral Drugs in Pregnant HIV-1 Infected Women for Maternal Health and Interventions to Reduce Perinatal HIV-1 Transmission in the United States* (Updated May 4, 2001)

The guidelines are Living Documents and reflect the current state of knowledge regarding the use of antiretroviral agents. The guidelines are continually reviewed and updated as new data becomes available and as consensus is reached about changes in practice recommendations. The most recent changes are highlighted in the text of the guidelines in both online and print versions.

These updated guidelines as well as others (pediatric, health-care worker exposure, nonoccupational exposure considerations, opportunistic infections, and tuberculosis guidelines) are available at the ATIS website at <http://hivatis.org/trtgdlns.html>. Print versions of the guidelines can be ordered free-of-charge from the ATIS by contacting them at: 1-800-HIV-0440 (phone); atis@hivatis.org (e-mail); 1-301-519-6616 (fax); and 1-888-480-3739 (TTY) or by writing ATIS at:

HIV/AIDS Treatment Information Service
P.O. Box 6303
Rockville, MD 20849-6303

4. Reminder About Submitting 4151 Communicable Disease Report Forms for Newly Reportable Diseases and conditions

In April 2000 the following sixteen diseases, infections or conditions became newly reportable by Statute 252.05 and Administrative Rule HFS 145:

babesiosis	hemolytic uremic syndrome (HUS)
cat scratch disease	hepatitis C
cryptosporidiosis	invasive Group A Streptococcal disease
cyclosporiasis	invasive Group B streptococcal disease
<i>E. coli</i> O157:H7	invasive <i>Streptococcus pneumoniae</i>
enterohemorrhagic <i>E. coli</i>	Listeriosis
enteroinvasive <i>E. coli</i>	ricin toxin exposure
enteropathogenic <i>E. coli</i>	
enterotoxigenic <i>E. coli</i>	

Statute and Rule require that reportable diseases be reported to the state epidemiologist for entry in to the state disease database. Data is transmitted weekly to the Centers for Disease Control and Prevention without personal identifiers. Not all reporting sources in the state are aware that some of these diseases are now reportable. For updated information on case definitions, laboratory tests for confirmation, and forms for public health follow-up, please refer to the revised EPINET Manual which can be found on the Health Alert Network Website

<https://www.han.wisc.edu>

Since 1999, the Wisconsin Division of Public Health (WDPH) has been routinely performing DNA testing of all *E. coli* O157:H7 isolates forwarded to the Wisconsin State Laboratory of Hygiene (WSLH) in an effort to detect state and national outbreaks. During 2000, the WSLH conducted DNA testing of 201 *E. coli* O157:H7 isolates but the WDPH did not receive an "Acute and Communicable Disease Case Report Form (DPH 4151) on 88 (44%) of these *E. coli* O157:H7 infections. Please remember that when isolates are submitted to the laboratory for DNA testing, the laboratory slip accompanying the specimen may not contain needed demographic information

and it is important that a 4151 form is submitted to WDPH. If clusters of *E. coli* O157:H7 infection based on time, geographic location or DNA patterns are detected by WDPH, follow-up information on those cases will be requested by WDPH staff through local health department staff. There is no need to submit the 4 page *E. coli* O157:H7 follow-up form when the initial 4151 form is submitted.

Since 1999, the WDPH has been collecting invasive bacterial isolates including Group A *Streptococcus* (*Streptococcus pyogenes*), Group B *Streptococcus* (*Streptococcus agalactiae*) and *Streptococcus pneumoniae* isolates through a voluntary laboratory surveillance project funded by the Centers for Disease Control and Prevention. All isolates are analyzed using DNA testing techniques to assist in cluster investigations, to identify trends in age and seasonality of these organisms, and to identify trends in antibiotic resistance. Prior to April 1, 2001, it was difficult to gather all the patient demographic information received from the 4151 forms. Now that invasive bacterial diseases are reportable, the patient demographic information contained on the 4151 is of great value for assisting us in surveillance and cluster investigation efforts.

We thank you for your attention to reporting of these newly reportable diseases. If you have comments on how reporting can be streamlined or improved, please contact the Communicable Disease Epidemiology (CDES) section chief, Mary Proctor (608/267-9005). If you need more 4151 communicable disease report forms, please contact the CDES program assistant, Pam Hazlett at 608/267-7321.

5. TB Information Guide CD-ROM

The *TB Information Guide* is a CD-ROM that includes many of the materials found on the CDC Division of Tuberculosis Elimination (DTBE) web site. The CD-ROM is a quick access and convenient resource for those who do not have time to connect to the Internet or for those who have intermittent access to the Internet. The CD-ROM contains:

- educational materials for providers and patients
- major TB guidelines
- Morbidity and Mortality Weekly Report (MMWR) TB-related articles
- surveillance reports
- slide sets
- information on ordering other materials from DTBE

Copies of the *TB Information Guide* CD-ROM may be requested using 2 different mechanisms:

- through the DTBE's online ordering system: <http://www.cdc.gov/nchstp/tb>
- through the CDC Voice and Fax Information System by calling toll free: 1-888-232-3228 then selecting 2,5,1,2,2,2 and requesting *TB Information Guide* order #99-6879

6. "...three are called, but only two are chosen..."

During the month of May the CDES was notified about 3 potential foodborne disease outbreaks, but only two were eventually classified as foodborne outbreaks.

Outbreak 1. On May 14th, the BCD/CDES received a call from a health department in the Northeast Region. Their office received a call following gastrointestinal illness among two groups of persons who ate at a common restaurant on May 12th. The onsets of illness were May 13th and the illnesses were characterized by diarrhea, vomiting, body aches, low-grade fever, headaches, and chills. Twenty-three patrons reported illness and one person was hospitalized. During an investigation it was discovered that the cook at the restaurant also became ill, but the onset of the cook's illness coincided with that of the ill patrons. Stool samples were collected from ill patrons and ill food workers; ill food workers were excluded until asymptomatic and foods prepared by ill food workers were discarded. The Wisconsin State Laboratory of Hygiene identified calicivirus ("Norwalk-like" virus) in stool samples from a patron and ill food worker. The investigation subsequently revealed one of the children of an ill patron had onset of a

gastrointestinal illness two days before the restaurant exposures. A waitress reported that during the meal the father of the ill child went to their car to change the ill child's diaper. Because the father did not use the restaurant's hand washing facilities and the common illness between the ill child and ill patrons, it was postulated that the family were the source of possible cross-contamination to utensils, buffet or salad bar items.

Outbreak 2. On May 16th, the BCD/CDES received a call from a health department from the Northern Region. Their office received a call regarding gastrointestinal illness among 6 of 7 persons following a meal at a restaurant. The onset of illness ranged from 30 to 45 hours (median = 36 hours) and was characterized by nausea, vomiting, body aches, chills and diarrhea. The WSLH identified calicivirus in a stool specimen from an ill patron. The signs and symptoms of illness or illness onset times were consistent with calicivirus infection and the restaurant as a point source for infection. During the investigation no illnesses were reported among food workers or their families; however, it was difficult to communicate with the food workers because they did not speak English. This emphasizes the need for local health departments to have access to multi-lingual food handling instructions based on the FDA Food Codes.* (* www.profoodsafety.org)

Outbreak 3. On May 17th, the BCD/CDES received a call from a health department in the Southeastern Region. Their office received a call regarding gastrointestinal illness among 3 individuals who believed their illness was associated with a particular restaurant. One of the ill patrons who experienced nausea, vomiting, bloody diarrhea, fever and abdominal cramping was seen at a local emergency room. Urine and blood cultures were collected, but no stool cultures were obtained. Initial questioning by the environmental health officer revealed the group also ate chicken purchased from another commercial restaurant chain by another family member. Subsequent stool specimens sent to the Milwaukee Health Department Laboratory and a Cook County (Illinois) Laboratory were tested for bacterial pathogens and were negative. Because no enteric pathogens were identified, no other cases were reported in association with either of the mentioned restaurants, and the three individuals had more than one common meal, this illness "cluster" could not be classified as an outbreak. The information was filed as a "food complaint" by the local health department.

These three case studies demonstrate the importance of collecting appropriate clinical specimens, examining all possible food exposures and restricting ill food workers from food preparation.

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